Commander SK

Simplicity with Functiona

Snap in Fieldbus
or I/O options
such as EtherNet/IP or
"Real-Time" clock I/O
with Solution Modules

Add PLC functionality
with the
LogicStick

lity

- Easy Keypad Control
- Top 10 Parameters on Cover
- SmartStick Parameter Cloning
- Built-in EMC filter and DB Transistor
- Industry-leading two-year warranty and all major approvals

The new 3Ø size D Commander SK
5 hp @ 230V, 10 hp @ 460V

Commander SK Overview

Simplicity with Functionality

OPERATOR INTERFACE

CTOPCserver

HMI Operator Interface

FREE Software

CTSoft
CTScope

SK-Keypad Remote

SM-Keypad Plus

SmartStick

EXTERNAL PLC CONTROL

CONTROL MODE

PLC

PC

INPUT/OUTPUT

Options

SM-Bipolar

SM-I/O Timer

SM-I/O Lite

SM-PELV

SM-I/O 120V

SM-I/O 24V

Standard

3 Analog
5 Digital I/O
(Frequency In & Out)
1 Relay Out

FILTERS

Standard

Options

V/Hz / Open Loop Vector

DYNAMIC BRAKING

Zero Space Internal
Brake Resistor
E-Stop Duty
size 2

Dynamic Brake Resistor
Cyclical or E-Stop Duty

APPLICATIONS WITH PLC FUNCTIONALITY

Logicstick

Programming Platform

SyPTLite

Standard

PLC Functionality
Features
Function Block Programming
Ladder Logic Sequencing

COMMUNICATIONS

Standard

Modbus RTU

Options

Modbus TCP/IP

Commander SK

Simplicity with Functionality

Commander SK has been designed to be a simple, compact, cost effective AC motor speed controller that delivers performance with simplicity and ease of use. With all the parameters you need for 90% of applications printed on the front of the drive, Commander SK ensures installation and commissioning are straight forward.

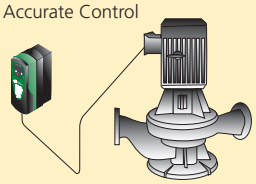
However, for more demanding applications, Commander SK can deliver benchmark functionality at no added cost to the base drive itself. Plug-in options, dynamic performance, PLC functionality and other advanced features ensure that in more complex applications Commander SK can deliver more than the average general purpose drive - giving you lower cost solutions and better productivity in your motor control applications.

- **1 to 1.5 hp (.75 to 1.1kW), 1Ø 100-120VAC**
- **0.3 to 3 hp (.25 to 2.2kW), 1Ø 200-240VAC**
- **1.5 to 40 hp (1.1 to 22kW), 3Ø 200-240VAC**
- **0.5 to 200 hp (0.37 to 110kW), 3Ø 380-480VAC**
- **3 to 150 hp (2.2 to 90kW), 3Ø 575VAC**
- **25 to 175 hp (15 to 110kW), 3Ø 690VAC**

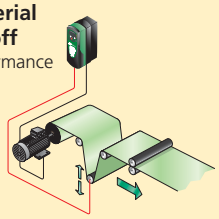
- **Easy to set-up – all the parameters you need (90% of typical applications) are printed on the front**
- **Easy installation – choose between simple panel mounting and DIN-rail mounting (up to 2 hp)**
- **Simple connections – easy access terminals with clear marking**
- **Simple start-up – easy push button set-up - no need for complex programming**
- **Communications – modbus RTU standard, available fieldbus options are Profibus-DP, INTERBUS, DeviceNet, CANopen, Ethernet**
- **PLC Functionality– LogicStick and IEC61131-3 ladder and function block programming**
- **Wide range of I/O – extra I/O options available including Real Time Clock**
- **Performance – high performance open loop vector and torque control**

TYPICAL APPLICATIONS

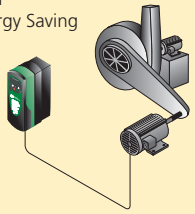
Pump
Accurate Control



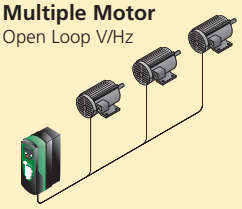
Material Payoff
Performance



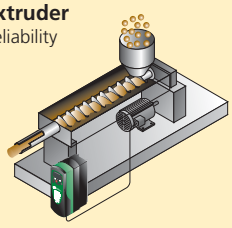
Fan
Energy Saving



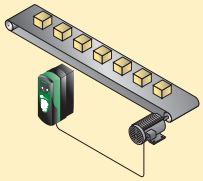
Multiple Motor
Open Loop V/Hz



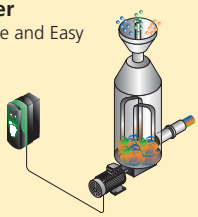
Extruder
Reliability



Conveyor
Smooth Acceleration



Mixer
Simple and Easy



FEATURE
Performance Advantage

Open loop vector control with true space vector modulation
Precise control algorithm provides full torque down to 1 Hz for exceptional performance

Access to multiple parameter levels
Customizes the drive to meet each user's needs: simple (level 1), flexible (level 2) and advanced (level 3)

Terminal connection drawings and Level 1 parameters (9) listed on the drive's front cover
On-the-spot easy reference for drive set-up and maintenance

Static auto-tune
Allows fast motor / drive optimization without motor shaft rotation

Two sets of motor map parameters saved in the drive's memory
Allows sequenced switching between two motors with different operating characteristics

Configurable analog and digital I/O
Customizes drive to the specific application

S-ramp accel / decel profiling
Provides smooth speed transitions, minimizing machine "jerk"

Built-in independent PID control
Eliminates the need for an external PID controller while providing "outer loop" control of a process variable

Real Time Clock option
For scheduling and timing operations

Wide range of industry standard fieldbuses
Modbus RTU (Standard), Profibus-DP, INTERBUS, DeviceNet, CANopen, Ethernet

Snap in (Additional) Functionality

SmartStick

The SmartStick cloning module provides fast and cost-effective drive-to-drive parameter transfer and storage without a PC.

SmartStick

LogicStick PLC Funtionality

Replace nano and micro PLCs by using LogicStick and IEC61131-3 ladder and function block programming.

LogicStick

Fieldbus Communications

The available fieldbus options are Profibus-DP, INTERBUS, DeviceNet, CANopen and Ethernet.

SM-Profibus

Expandable I/O

In additional to the standard built-in I/O a wide range of I/O options are available to greatly increase the capabilities of the Commander SK.

SM-I/O Timer

N1652

2 YEAR Digital Drive Warranty

5 YEAR Extended Warranty

READY TO RUN RIGHT OUT OF THE BOX!

Commander SK comes from the factory preset to operate in V/Hz, and takes only minutes to have up and running:

1. Mount the drive
2. Wire up the motor
3. Wire up the power
4. Hardware enable the drive by placing a jumper between B2 and B4
5. Verify rated motor Amps and Volts settings
6. Press the Start button to run
7. Press Up or Down arrows to set the speed

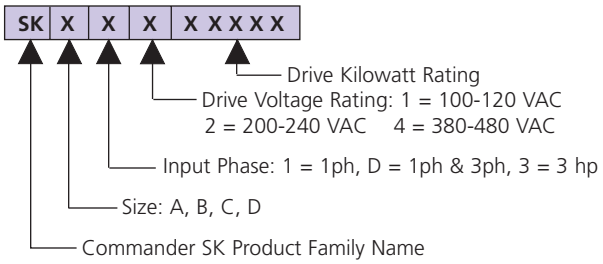
SECONDS TO RECONFIGURE...

To change the drive to another configuration is a simple and fast process. For example, if you want to set the drive to the HVAC (Hand-off-auto) preset, simply:

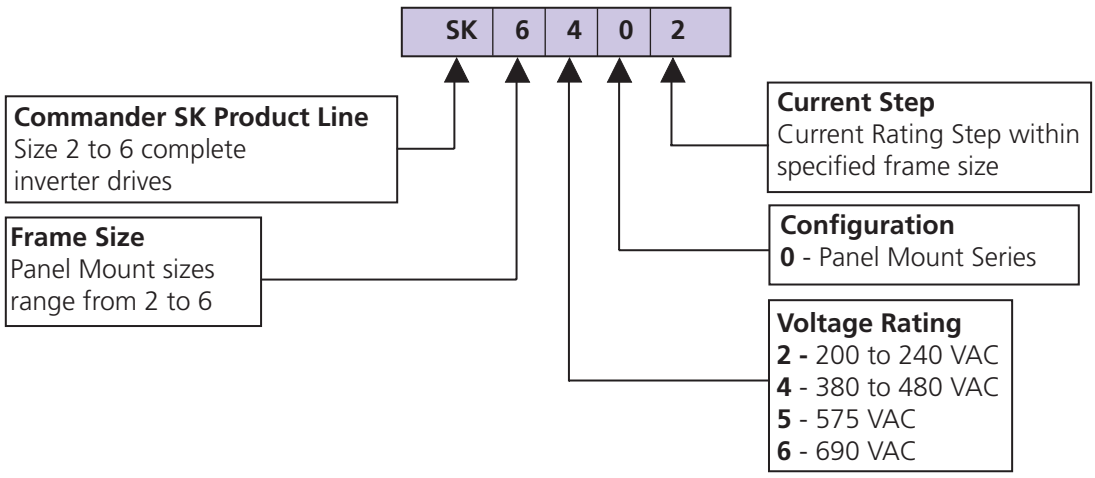
1. Press the Mode button (M)
2. Press the Up Arrow (^) until you reach parameter 05, Drive Configuration
3. Select by pressing the Mode button (M)
4. Press the Up Arrow through the available preset configurations until you see HVAC
5. Press the Mode button (M) to select HVAC
6. Press the Stop/Reset button and the default HVAC configuration is set

Display Keypad included as standard, Remote Keypad optional

Order String (Sizes A-D)


SK X X X X X X X X
Drive Kilowatt Rating
Drive Voltage Rating: 1 = 100-120 VAC
2 = 200-240 VAC 4 = 380-480 VAC
Input Phase: 1 = 1ph, D = 1ph & 3ph, 3 = 3 hp
Size: A, B, C, D
Commander SK Product Family Name

Order String (Sizes 2-6)


SK 6 4 0 2
Commander SK Product Line
Size 2 to 6 complete inverter drives
Frame Size
Panel Mount sizes range from 2 to 6
Current Step
Current Rating Step within specified frame size
Configuration
0 - Panel Mount Series
Voltage Rating
2 - 200 to 240 VAC
4 - 380 to 480 VAC
5 - 575 VAC
6 - 690 VAC

COMMANDER SK SELECTION CHART

100 / 120 VAC ±10% 1Ø (230V output)	Normal Duty			Heavy Duty		
Order Code	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)
SKB1100075	1	4	0.75	1	4	0.75
SKB1100110	1.5	5.2	1.1	1.5	5.2	1.1

200 / 240 VAC ±10% 1Ø	Normal Duty			Heavy Duty		
Order Code	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)
SKA1200025	0.33	1.7	0.25	0.33	1.7	0.25
SKA1200037	0.5	2.2	0.37	0.5	2.2	0.37
SKA1200055	0.75	3	0.55	0.75	3	0.55
SKA1200075	1	4	0.75	1	4	0.75
SKBD200110	1.5	5.2	1.1	1.5	5.2	1.1
SKBD200150	2	7	1.5	2	7	1.5
SKCD200220	3	9.6	2.2	3	9.6	2.2

200 / 240 VAC ±10% 3Ø	Normal Duty			Heavy Duty		
Order Code	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)
SKBD200110	1.5	5.2	1.1	1.5	5.2	1.1
SKBD200150	2	7	1.5	2	7	1.5
SKCD200220	3	9.6	2.2	3	9.6	2.2
SKD3200400	5	17	4	5	17	3
SK2201	5	15.5	4	3	12.6	3
SK2202	7.5	22	5.5	5	17	4
SK2203	10	28	7.5	7.5	25	5.5
SK3201	15	42	11	10	31	7.5
SK3202	20	54	15	15	42	11
SK4201	25	68	18.5	20	56	15
SK4202	30	80	22	25	68	18.5
SK4203	40	104	30	30	80	22

575 VAC ±10% 3Ø	Normal Duty			Heavy Duty		
Order Code	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)
SK3501	3	5.4	3	2	4.1	2.2
SK3502	5	6.1	4	3	5.4	3
SK3503	7.5	8.4	5.5	5	6.1	4
SK3504	10	11	7.5	7.5	9.5	5.5
SK3505	15	16	11	10	12	7.5
SK3506	20	22	15	15	18	11
SK3507	25	27	18.5	20	22	15
SK4603	30	36	22	25	27	18.5
SK4604	40	43	30	30	36	22
SK4605	50	52	37	40	43	30
SK4606	60	62	45	50	52	37
SK5601	75	84	55	60	63	45
SK5602	100	99	75	75	85	55
SK6601	125	125	90	100	100	75
SK6602	150	144	110	125	I25	90

NEW

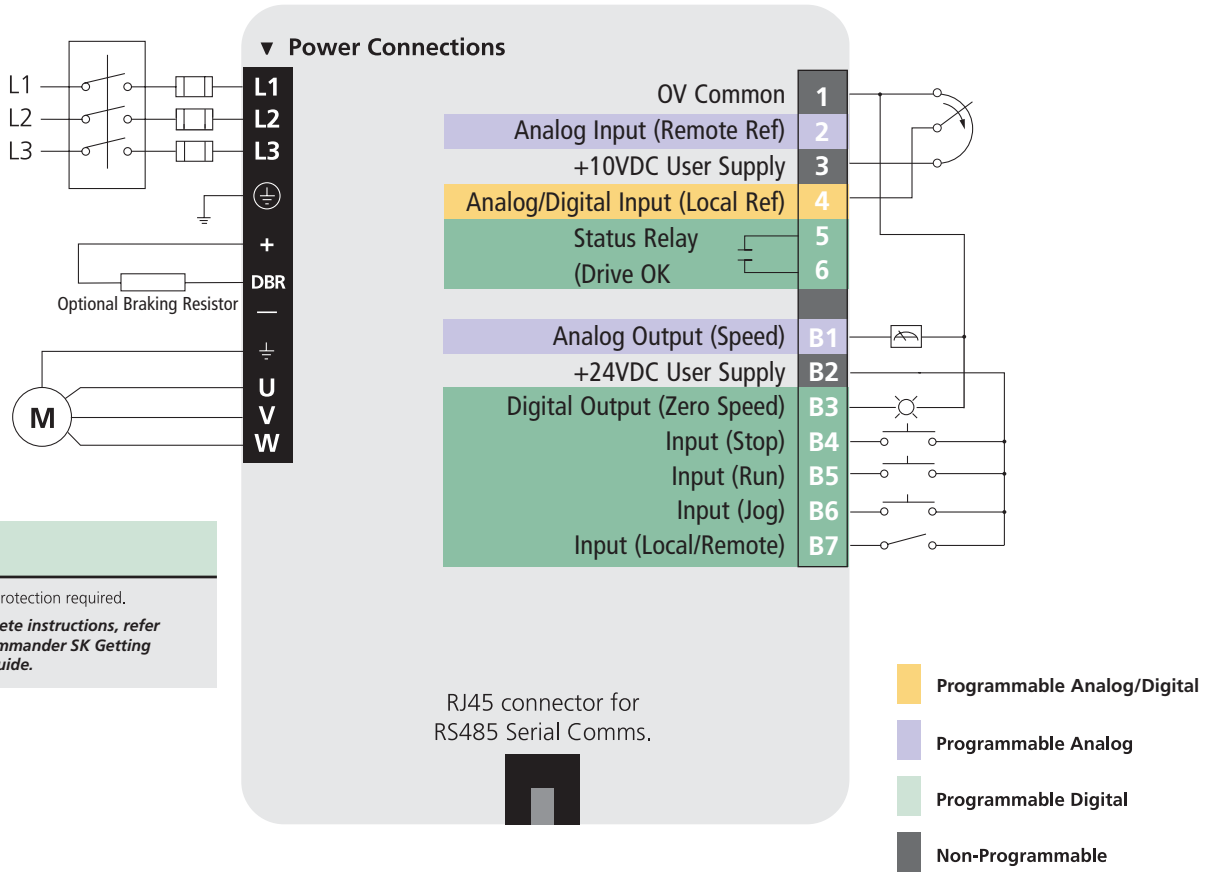
Higher Horsepower Commander SK Models Now to 200 hp

380 / 480 VAC ±10% 3Ø	Normal Duty			Heavy Duty		
Order Code	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)
SKB3400037	0.5	1.3	0.37	0.5	1.3	0.37
SKB3400055	0.75	1.7	0.55	0.75	1.7	0.55
SKB3400075	1	2.1	0.75	1	2.1	0.75
SKB3400110	1.5	2.8	1.1	1.5	2.8	1.1
SKB3400150	2	3.8	1.5	2	3.8	1.5
SKC3400220	3	5.1	2.2	3	5.1	2.2
SKC3400400	5	9	4	5	9	4
SKD3400550	7.5	13	5.5	7.5	13	5.5
SKD3400750	10	16.5	7.5	10	16.5	7.5
SK2401	10	15.3	7.5	7.5	13	5.5
SK2402	15	21	11	10	16.5	7.5
SK2403	20	29	15	20	25	11
SK2404	20	29	15	20	29	15
SK3401	25	35	18.5	25	32	15
SK3402	30	43	22	30	40	18.5
SK3403	40	56	30	30	46	22
SK4401	50	68	37	50	60	30
SK4402	60	83	45	60	74	37
SK4403	75	104	55	75	96	45
SK5401	100	138	75	100	124	55
SK5402	125	168	90	125	156	75
SK6401	150	205	110	150	180	90
SK6402	200	236	132	150	210	110

690 VAC ±10% 3Ø	Normal Duty			Heavy Duty		
Order Code	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continuous Current (A)	Typical Output (kW)
SK4601	25	22	18.5	20	19	15
SK4602	30	27	22	25	22	18.5
SK4603	40	36	30	30	27	22
SK4604	50	43	37	40	36	30
SK4605	60	52	45	50	43	37
SK4606	75	62	55	60	52	45
SK5601	100	84	75	75	63	55
SK5602	125	99	90	100	85	75
SK6601	150	125	110	125	100	90
SK6602	175	144	132	150	125	110

Normal Duty	For applications that use self-ventilated induction motors and require a low overload capability (e.g. fans, pumps)
Heavy Duty	150% overload current for 60 seconds. For constant torque applications that require a high overload capability (e.g. cranes, hoists).

COMMANDER SK TERMINAL DIAGRAM



NOTE

* Thermal protection required.

For complete instructions, refer to the Commander SK Getting Started Guide.

TERMINAL DESCRIPTION

Pin	Function ①	Type/Description	Notes
T1	0V Common	Common for External Analog Signals	
T2 ①	Analog Input 1 (A1) either voltage or current	Remote speed reference input 4-20mA	
T3	+10VDC	Reference Supply	5 mA max Short Circuit Protected
T4	Analog Input 2 (A2) or Digital Input	Local Speed reference input 0-10V	0 to +10 VDC (AI) 0 to +24 VDC (DI)
T5 T6	Status Relay (Normally open)	Drive Healthy	240 VAC 30 VDC 2A/6A resistance
B1	Analog Output 1 single ended Unipolar	Motor speed	0 to +10 VDC @ 5 mA max
B2	+24 VDC Output	User Supply	100 mA max
B3	Digital Input/Output Pulse Output	Zero speed	0 to +24 VDC, Pulse output to 10 kHz

Pin	Function ①	Type/Description	Notes
B4	Stop	Digital Input	0 to +24 VDC
B5	Run	Digital Input	0 to +24 VDC,
B6	Jog	Digital Input	0 to +24 VDC,
B7	Local/Remote Speed Reference Select A1/A2	Digital Input / Pulse Input	0 to +24 VDC, Pulse input to 50 kHz

① 4-20, 20-4, 20-0mA are also available. See Commander SK Getting Started Guide.

Values in parenthesis designate functions when #5 = AI.AV
Drive default is keypad mode #5 = PAd

COMMANDER SK SPECIFICATIONS

Environment
IP20

UL TYPE 1or NEMA 1 rating with optional cover + conduit entry kit

Ambient temperature -10°C to +40°C @ 3kHz switching
Operation to +50°C/+55°C with de-rating

Humidity 95% maximum (non-condensing)

Electromagnetic Immunity complies with EN61800-3 and EN61000-6-3 and 4

Electromagnetic Emissions complies with EN61800-3 (second environment) as standard. Complies with EN61000-6-3 (residential) and EN61000-6-4 (industrial) generic standards with optional footprint EMC filter

Control
Open loop vector control, V/Hz

Speed or torque control

Reference input: 0-10V, 0-20mA, 4-20mA, 8 Presets, Pulse, PWM
(-10 to +10V SM-Bipolar option)

Digital I/O - All configurable
- 4 inputs, not stop, run, jog, local/remote (default)
- 1 I/O zero speed (default)
- 1 relay drive health (default)

Switching frequency: 3kHz (default)
- 230V: 6,12,18kHz
- 460V: 6,12kHz

Output frequency 0 to 1500Hz

Accel and Decel ramps (linear and S type)

Positive logic control

Serial communication
- Modbus RTU RS-485 via RJ45 connector
- Baud rate 4800, 9600, 19200 or 38400 bits per second

DC injection braking as standard

Dynamic braking transistor as standard

Dynamic motor V/Hz for energy saving

Quadratic motor V/Hz for fan and pump optimization

Protection
Undervoltage, Supply and DC Link overvoltage, Phase loss, Drive overload, Instantaneous overcurrent, Short circuit, Ground fault, Drive thermal, Watchdog, Motor thermal

General Characteristics
Maximum overload 150% of rated current for 60 sec

Intelligent Thermal Management (ITM) optimizes switching frequency

Catch a spinning motor

Power loss ride through

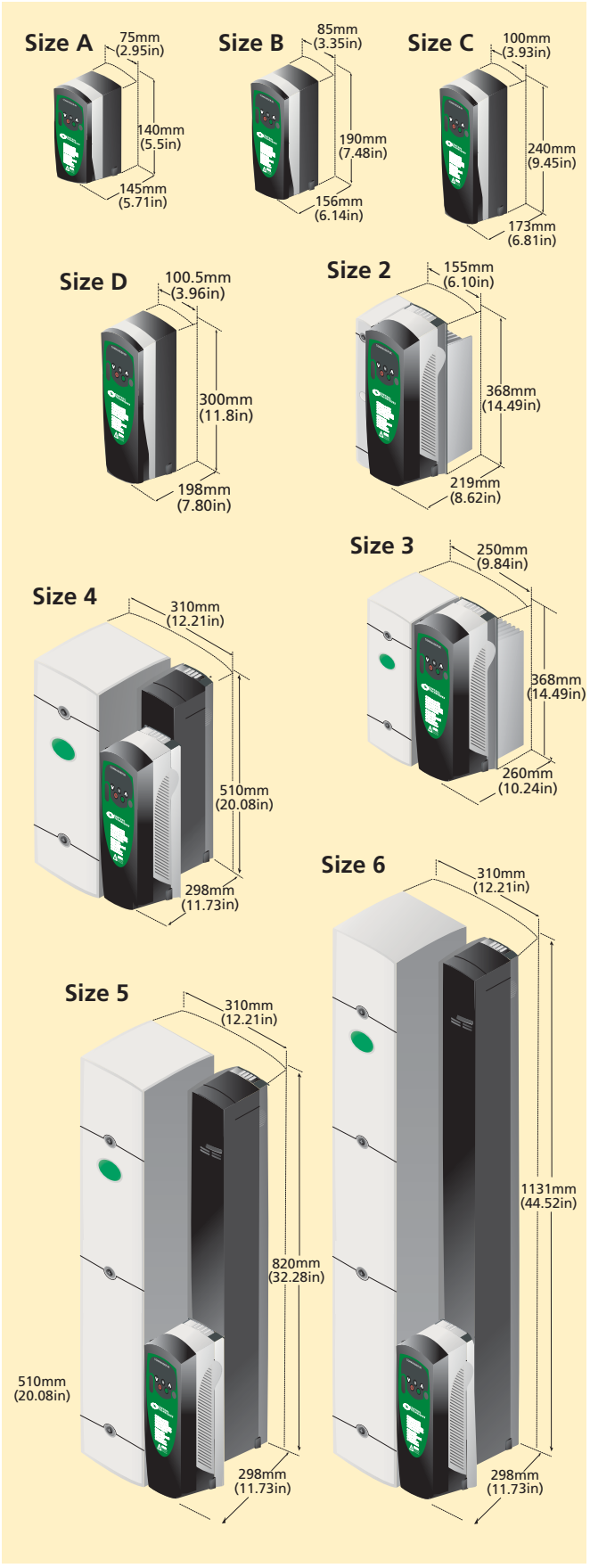
Automatic no-spin autotune for fast performance optimization

Keypad access to all parameters for more demanding applications

Approvals & Listings

UL, cUL	UL File Listed 8D14
IEC	Meets IEC Vibration, Mechanical Shock and Electromagnetic Immunity Standards
CE	Low Voltage Directive
UL	UL type 1 with kit
ISO 9001:2000	Certified Manufacturing Facility
ISO 14001	Certified Manufacturing Facility

COMMANDER SK DIMENSIONS



Commander SK

Options

Commander SK has been designed to offer simplicity with an impressive selection of options and standard features. It also offers functionality that enables users to get more productivity from their machines.

Users that scratch the surface of this simple drive will discover a list of dynamic and functional options that owe much to the ground breaking Solution Platform products, such as Unidrive SP, in the Control Techniques product portfolio.

Plug in the power of a PLC!

OPTIONS AT-A-GLANCE

Option	Description	Order Code
Drive Configuration & Programming	Configuration Tool	CTSoft
	Keypad to Drive	SP-LCD-485-XXX
	RS232/485 Cable	CT-Comms-Cable
	USB Cable	CT-USB-Cable
	Cloning and parameter storage	SmartStick
Operator Interfaces	Remote LED display	SK-Keypad Remote
	Remote LCD display	SM-Keypad Plus
	HMI Operator Interfaces	See Accessories Section
Power Accessories	Internal EMC Filter	Standard
	External EMC Filter	To fit drive
	Braking Resistor	To fit drive
Environmental Protection and Cable Management Options	Top cover and conduit entry	SK-NEMA-KIT A, B, C or D
	Conduit Boxes sizes 2-6	C-Box-S2, C-Box-S3, C-Box-S4, C-Box-S5, C-Box-S6
Input/Output Size B and up accept up to one SM total	Extended I/O	SM-I/O Lite
	Extended I/O plus Real Time Clock	SM-I/O Timer
	Double Insulated Extended I/O	SM-PELV
	120V Extended I/O	SM-I/O 120V
	24V Protected I/O	SM-I/O 24V
	Bipolar Reference	SM-Bipolar
Communications Size B and up accept up to one SM total	Modbus RTU	Standard
	PROFIBUS-DP	SM-PROFIBUS-DP
	DeviceNet	SM-DeviceNet
	CANopen	SM-CANopen
	INTERBUS	SM-INTERBUS
	Ethernet	SM-Ethernet
Application Programming Software (IEC61131-3)	Ladder and function block programming	SyPTLite
	Memory for SyPTLite program	LogicStick

Drive Configuration and Parameter Programming

DRIVE CONFIGURATION TOOL

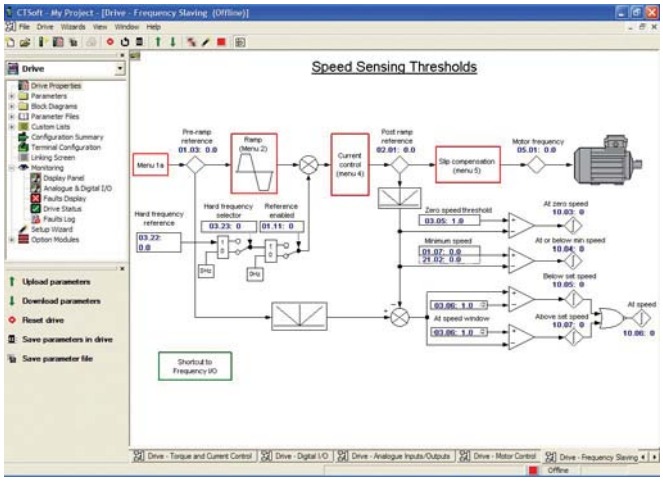
CTSoft software is a free Windows-based drive configuration tool designed to enable the complete control and display of all parameters within a Commander SK. Functions within CTSoft allow data to be uploaded, viewed, saved, or retrieved from disk, modified and printed. It can be used off-line in the office or on-line in the factory. CTSoft communicates with the Commander SK via the computer's serial port to the drive's RS485 port using a communications cable (CT Comms Cable or CT-USB-Cable).

Some of CTSoft's capabilities include:

- Remote Upload/Download
- Parameter Saving
- Monitor Screens
- Multiple Window Display
- Block Diagram Animation
- Project Storage

FREE Software

CTSoft IS SUPPLIED WITH THE DRIVE OR YOU CAN DOWNLOAD FROM www.emersonct.com



SMARTSTICK

This option enables the simple set up of parameters in a variety of ways. The SmartStick can:

- 'Clone' a complete set of parameters from the first drive to multiple drives (ideal for serial production)
- Download parameter settings to the drive to easily set up your application
- Automatically save the user parameter set up for storage and maintenance purposes
- Load complete motor map parameters

The drive only communicates with the SmartStick when commanded to read or write, meaning that it may be "hot swapped".

Operator Interfaces

KEYPAD OPTIONS

The Commander SK can operate and be set up using the standard fixed keypad, or with either the SK-Keypad Remote or SM-Keypad Plus. The SK-Keypad Remote is a NEMA12 (IP65) full-function, 7-digit LED data display with an additional multi-function push button. The SM-Keypad Plus is a back-lit LCD display option that can be remote mounted, has 5 languages, plus custom text database, on-line help, and HMI features.

SK-Keypad Remote

SM-Keypad Plus

HUMAN MACHINE INTERFACE (HMI)

These operator interface units complement the product line by offering an impressive way of accessing parameters and adding more programming power to your application.

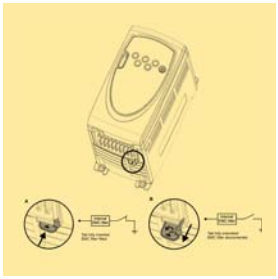
For more information, refer to the Accessories Section.

Power Accessories

DYNAMIC BRAKING RESISTORS

Dynamic braking resistors provide a means of rapidly decelerating or stopping the motor and load. The mechanical energy stored in the spinning mass is converted into electrical energy by the drive and then quickly dissipated into the resistor. (See Power Accessories section for braking resistor ratings and model numbers)

INTERNAL EMC FILTER



An internal EMC filter is provided as standard with the Commander SK which is adequate for most industrial applications. The drive and filter conforms to EN61800-3 (second environment). For installations where it is deemed necessary, Control Techniques provide a range of addition external EMC filters. The internal filter can be easily removed if the drive is to be used on IT supplies or with low earth leakage external EMC Footprint filters.

EXTERNAL EMC FILTERS

EMC filters are used to minimize high frequency power supply line disturbances caused by PWM AC drives that may interfere with proper operation of sensitive electronic equipment. These specific filters have been assessed for conformance with the EMC directive by testing with the appropriate Control Techniques drives.

EMC Filter Description	Voltage	Order Code
SK-EMC Filter Size A 1 Phase	200 to 240V +/- 10% 1 hp	4200-6122
SK-EMC Filter Size B 1 Phase	100 to 120V +/- 10% 1 hp	4200-6216
SK-EMC Filter Size B 1 Phase	200 to 240V +/- 10% 1 hp	4200-6212
SK-EMC Filter Size B 3 Phase	380 to 480V +/- 10% 3 hp	4200-6213
SK-EMC Filter Size C 1 Phase	200 to 240V +/- 10% 1 hp	4200-6310
SK-EMC Filter Size C 3 Phase	380 to 480V +/- 10% 3 hp	4200-6311
SK-EMC Filter Size D 3 Phase	200 to 240V +/- 10% 1 hp	4200-6411
SK-EMC Filter Size D 3 Phase	380 to 480V +/- 10% 3 hp	4200-6411

Note: Refer to *Options & Accessories* section for low leakage filters.

Environmental Protection and Cable Management

TOP COVER OPTIONS

A plastic top cover can be fitted to the Commander SK. This cover simply clips onto the top of the drive for protection from falling particles. The top cover provides protection to IP4X per IEC specification.

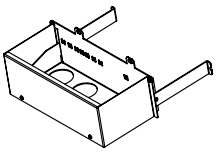
NEMA 1 KIT

The NEMA 1 Kit includes a Top Cover, Side Covers, and a Conduit Entry Box providing a UL Type 1 rating. With this option Commander SK drives can be mounted into air handling ducts.

CONDUIT BOXES*

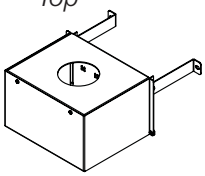
Conduit plates for Commander SK, Commander GP20 and Unidrive SP wall-mount drives.

C-BOX-S2

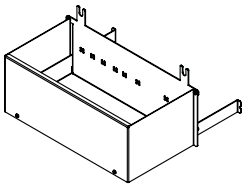


C-BOX-S3-6
(two pieces)

Top



Bottom



Description	Order Code
Plastic Top Covers	SK-COVER-A, SK-COVER-B, SK-COVER-C, SK-COVER-D
UL Type 1 Rating Kit	SK NEMA1 KIT A, SK NEMA1 KIT B, SK NEMA1 KIT C, SK NEMA1 KIT D
Conduit Boxes sizes 2-6	C-Box-S2, C-Box-S3, C-Box-S4, C-Box-S5, C-Box-S6

EMC FILTERS

The Commander SK EMC filters are designed such that they can be mounted in either of two orientations.

- Bookend: filter mounts next to the drive with the smallest dimension being the width of the filter
- Footprint: filter mounts between the drive heatsink and the panel or enclosure

I/O OPTIONS

SM-BIPOLAR (Commander SK only)

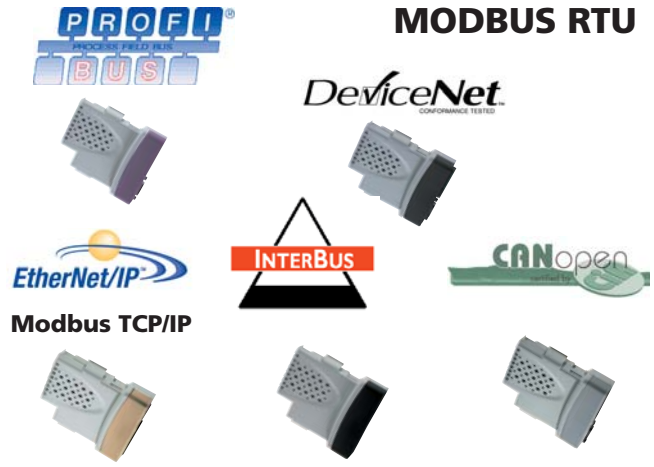
This module provides an optional bipolar speed reference input card for the Commander SK. It allows the direction of rotation of a motor to be controlled via an analog signal rather than the run forward and run reverse terminals or a forward/ reverse terminal.

- ±10V bipolar input
- Relay output

ADDITIONAL SM-I/O OPTIONS*

SM-I/O LITE | SM-I/O TIMER | SM-I/O PELV | SM-I/O 120V | SM-I/O 24V

COMMUNICATION OPTIONS*



* These I/O and Communications SM option modules work in other Control Techniques drives.

For more details and order codes see the AC Drive Options section at the end of the AC Drives section.

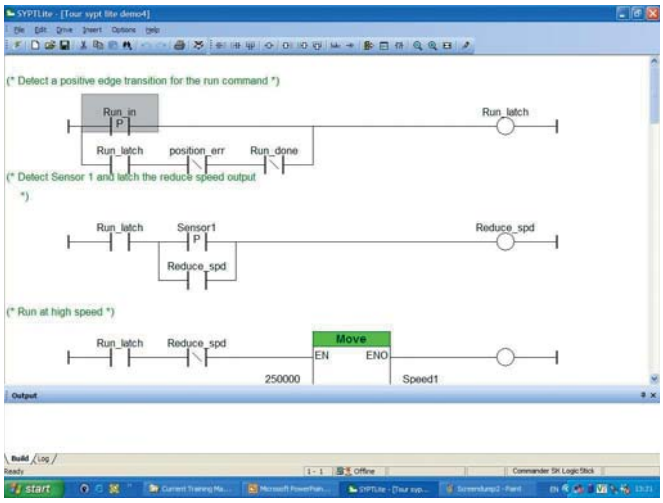
For complete product descriptions please refer to the Options and Accessories section.

Programming Software

SyPTLite IEC 61131-3 LADDER PROGRAMMING SOFTWARE

SyPTLite is a ladder diagram editor that allows you to develop programs that can be executed onboard Commander SK with a LogicStick.

SyPTLite is designed to meet the needs of the majority of automation users wishing to extend the functionality of the drive control and sequencing. The software has been developed with a definite focus on intuitive ease of use allowing you to quickly access all of the drive's parameters and to monitor and debug your ladder program online.



SyPTLite contains a comprehensive library of functions that is based on those available in the SyPTPro programming tool. These include:

- Arithmetic Blocks
- Timers
- Multiplexers
- Bit Manipulation
- Comparison Blocks
- Counters
- Latches

FREE Software

SyPTLite IS SUPPLIED WITH THE DRIVE OR YOU CAN DOWNLOAD FROM www.syptlite.com

Programming Software

SyPTLite WITH LOGICSTICK

Commander SK is Control Techniques' simple and easy-to-use general-purpose drive. However, Commander SK contains features and functions that you may not expect to find on a low-cost drive, such as the flexibility to program PLC applications onboard the drive. By inserting a LogicStick into the front of the drive, you quickly add memory for program storage that allows you to write a PLC ladder program using SyPTLite. The drive is prioritized to execute all motor control related functions first and will use any remaining processing time to execute the SyPTLite ladder program as a background activity. Inset shows strap used to secure the LogicStick.

Description	Order Code
The LogicStick plugs into the front of the drive and enables you to program PLC functions within the drive. Typically 30-50 rungs of logic.	LogicStick

See the RapidPak pages in the Packaged Drives and Engineered Systems section for details.

"One Source" for AC products

Control Techniques can supply AC motors from 1/4 hp to 1500 hp. Motor enclosures include totally open drip proof, totally enclosed fan cooled, totally enclosed non-ventilated, and totally enclosed blower cooled. A variety of voltages are available along with mechanical and electrical modifications and accessories. Control Techniques can supply virtually any type of AC variable speed motor to meet your needs.

General Purpose Motors

Ideal for fans, pumps, conveyors, mixers, and other general purpose applications using the Unidrive SP and Commander series of drives.

High Performance Vector Motors

For use in applications like converting, printing, metals, paper, film and foil where precision, speed, and/or motor feedback are required.

Washdown Motors

For food and beverage and other clean applications, our washdown, and corrosion proof motors are a perfect match for our Commander SX NEMA 4X open or closed loop drive.

Other Speciality Motors

From chemical and aggregate duty motors to explosion proof motors, the One Source programs means we can get you a complete solution at the best value for your motor needs from 200V to 690V.

Looking for a complete Emerson solution?

Your Control Techniques distributor is your One Source for AC, Motion Control & DC products and accessories.